

AMENDMENTS TO THE CLAIMS

Claims 1-58. (canceled)

Claim 59. (currently amended) A method for reproducing digital data from a signal source, comprising the steps of:

reading out recording control information supplied by said source, said recording control information indicating the playback mode of said source and including copy management information indicating whether copying of only digital data is inhibited or copying of both digital data and analog signals is inhibited; and

performing a pre-set conversion operation on said digital data and/or an analog signal generated from said digital data, based on said recording control information;

wherein said pre-set conversion operation for said analog signal includes a color burst inverting operation in which the phase of a front part of a color burst signal in said analog signal is inverted.

Claim 60. (original) The method according to claim 59, wherein said digital data is partitioned into sectors or blocks and said recording control information is included in at least one of said sectors or blocks.

Claim 61. (original) The signal reproducing method as claimed in claim 59, wherein the pre-set conversion operation on said digital data is a digital descrambling operation.

Claim 62. (original) The signal reproducing method as claimed in claim 61, wherein said digital data is ciphered data and said pre-set conversion operation on said digital data includes an operation of deciphering said digital data using key information derived from information used to generate said ciphered data.

Claim 63. (original) The signal reproducing method as claimed in claim 62, wherein said source is a disc-shaped recording medium and said key information is recorded at a pre-set position of said recording medium.

Claim 64. (original) The signal reproducing method as claimed in claim 63, wherein said digital data is partitioned into units and at least one of said units is recorded at said pre-set position.

Claim 65. (original) The signal reproducing method as claimed in claim 64, wherein said at least one unit is located in a lead-in area and/or a program area of said recording medium.

Claim 66. (original) The signal reproducing method as claimed in claim 65, wherein said at least one unit is placed in a header area of said program area.

Claim 67. (original) The signal reproducing method as claimed in claim 62, wherein said source is an Integrated Circuit (IC) recording medium and said key information is recorded at a pre-set position of said recording medium.

Claim 68. (original) The signal reproducing method as claimed in claim 67, wherein said digital data is partitioned into units and at least one of said units is recorded at said pre-set position.

Claim 69. (original) The signal reproducing method as claimed in claim 68, wherein said at least one unit is located in a lead-in area and/or a program area of said recording medium.

Claim 70. (original) The signal reproducing method as claimed in claim 69, wherein said at least one unit is placed in a header area of said program area.

Claim 71. (original) The signal reproducing method as claimed in claim 59, wherein said digital data is ciphered video and/or audio data and said pre-set conversion operation on said digital data is an operation of deciphering the digital data using at least a portion of the recording control information.

Claim 72. (original) The signal reproducing method as claimed in claim 59, wherein said digital data is ciphered video and/or audio data and said pre-set conversion operation on said digital data includes an operation of deciphering said digital data according to decoding means specified by at least a portion of said recording control information.

Claim 73. (original) The signal reproducing method as claimed in claim 59, wherein said analog signal is an analog video signal and wherein the pre-set conversion operation includes arraying a combination signal of plural pseudo synchronization pulses and plural white

peak signals across plural horizontal periods in a vertical blanking period of said analog video signal.

Claim 74. (original) The signal reproducing method as claimed in claim 59, wherein said analog signal is an analog color video signal and wherein said pre-set conversion operation includes changing the phase of at least a portion of a color burst signal associated with said color video signal.

Claim 75. (original) The signal reproducing method as claimed in claim 59, wherein the pre-set conversion operation includes arraying a signal coded with plural bits at a pre-set position in said analog signal.

Claim 76. (original) The signal reproducing method as claimed in claim 75, wherein said analog signal is an analog video signal and said pre-set position is a predetermined horizontal period within a vertical blanking period of said analog video signal.

Claim 77. (original) The signal reproducing method as claimed in claim 75, wherein said coded signal includes a recording limitation signal indicating a limitation on recording.

Claim 78. (currently amended) A method for reproducing digital video data from a signal record medium, comprising the steps of:

detecting recording control information from said video signal record medium,
said recording control information indicating the playback mode of said record medium

and including copy management information indicating whether copying of only digital data is inhibited or copying of both digital data and analog signals is inhibited; and performing a pre-set conversion operation on an analog video signal and/or said digital video data, based on the detected recording control information, wherein said pre-set conversion operation on said analog video signal includes arraying a combination of plural pseudo synchronization pulses and plural white peak signals across plural horizontal periods in a vertical blanking period of said analog video signal and includes a color burst inverting operation in which the phase of a front part of a color burst signal in said analog signal is inverted, and wherein said digital video data is ciphered data and said pre-set conversion operation on said digital video data includes deciphering said digital video data using key information.

Claim 79. (original) The signal reproducing method as recited in claim 78, wherein said pre-set conversion operation further includes changing the phase of at least a portion of a color burst signal associated with said analog video signal and/or a digital video data.

Claim 80. (original) The signal reproducing method as recited in claim 78, wherein said pre-set conversion operation includes arraying a signal coded with plural bits at a pre-set position in said analog video signal, said signal coded with plural bits being a recording limitation signal indicating a limitation on recording.

Claim 81. (original) The signal reproducing method as recited in claim 78, wherein said digital video data is partitioned into sectors or blocks and said recording control information is included in at least one of said sectors or blocks.

Claim 82. (original) The signal reproducing method as claimed in claim 81, wherein at least one of said sectors or blocks is placed in a lead-in area and/or a program area of said recording medium.

Claim 83. (original) The signal reproducing method as claimed in claim 82, wherein said recording control information includes key information derived from information used to generate said ciphered data.

Claim 84. (original) The signal reproducing method as claimed in claim 83, wherein said key information is placed into said sectors or blocks of said lead-in area and/or said program area.

Claim 85. (original) The signal reproducing method as claimed in claim 83, wherein said key information is placed into a header area of said program area.

Claim 86. (currently amended) An apparatus for reproducing digital data from a signal source, comprising:

means for reading out recording control information supplied by said signal source, said recording control information indicating the playback mode of said source

and including copy management information indicating whether copying of only digital data is inhibited or copying of both digital data and analog signals is inhibited; and means for performing a pre-set conversion operation on said digital data and/or an analog signal generated from said digital data, based on said recording control information;

wherein said pre-set conversion operation for said analog signal includes a color burst inverting operation in which the phase of a front part of a color burst signal in said analog signal is inverted.

Claim 87. (original) The apparatus according to claim 86, wherein said digital data is partitioned into sectors or blocks and said recording control information is included in at least one of said sectors or blocks.

Claim 88. (original) The apparatus as claimed in claim 86, wherein said digital data is digital audio and/or digital video data, and wherein said pre-set conversion operation is performed on said audio and/or video data based on said recording control information.

Claim 89. (original) The apparatus as claimed in claim 88, wherein said pre-set conversion operation on said digital data is a digital descrambling operation.

Claim 90. (original) The apparatus as claimed in claim 89, wherein said digital data is ciphered data and said pre-set conversion operation on said digital data includes an operation

of deciphering said digital data using key information derived from information used to generate said ciphered data.

Claim 91. (original) The apparatus as claimed in claim 90, wherein said source is a disc-shaped recording medium and said key information is recorded at a pre-set position of said recording medium.

Claim 92. (original) The apparatus as claimed in claim 91, wherein said digital data is digital audio and/or digital video data, wherein said digital data is partitioned into sectors or blocks, and wherein said recording control information is included in at least one of said sectors or blocks.

Claim 93. (original) The apparatus as claimed in claim 92, wherein said at least one sector or block is located in a lead-in area and/or a program area of said recording medium.

Claim 94. (original) The apparatus as claimed in claim 93, wherein said at least one sector or block is placed in a header area of said program area.

Claim 95. (original) The apparatus as claimed in claim 90, wherein said source is an Integrated Circuit (IC) recording medium and said key information is recorded at a pre-set position of said recording medium.

Claim 96. (original) The apparatus as claimed in claim 95, wherein said digital data is digital audio and/or digital video data, wherein said digital data is partitioned into sectors or blocks, and wherein said recording control information is included in at least one of said sectors or blocks.

Claim 97. (original) The apparatus as claimed in claim 96, wherein said at least one sector or block is located in a lead-in area and/or a program area of said recording medium.

Claim 98. (original) The apparatus as claimed in claim 97, wherein said at least one sector or block is placed in a header area of said program area.

Claim 99. (original) The apparatus as claimed in claim 88, wherein said digital data is ciphered data and said pre-set conversion operation on said digital data is an operation of digitally deciphering said digital data.

Claim 100. (original) The apparatus as claimed in claim 88, wherein said digital data is ciphered data and said pre-set conversion operation on said digital data is an operation of deciphering said digital data according to decoding means specified by at least a portion of said recording control information having key information.

Claim 101. (original) The apparatus as claimed in claim 86, wherein said analog signal is an analog video signal and wherein said pre-set conversion operation includes arraying

a combination signal of plural pseudo synchronization pulses and plural white peak signals across plural horizontal periods in a vertical blanking period of said analog video signal.

Claim 102. (original) The apparatus as claimed in claim 86, wherein said analog signal is an analog color video signal and wherein said pre-set conversion operation includes changing the phase of at least a portion of a color burst signal associated with said color video signal.

Claim 103. (original) The apparatus as claimed in claim 86, wherein said pre-set conversion operation involves arraying a signal coded with plural bits at a pre-set position in the analog signal.

Claim 104. (original) The apparatus as claimed in claim 103, wherein said analog signal is an analog video signal and said pre-set position is a predetermined horizontal period within a vertical blanking period of said analog video signal.

Claim 105. (original) The apparatus as claimed in claim 103, wherein said signal coded with plural bits includes a recording limitation signal indicating a limitation on recording.

Claim 106. (currently amended) A method for recording a signal, comprising the steps of:

generating recording control information for supervising recording of said signal on a signal record medium; said recording control information including copy

management information indicating whether copying of only digital data is inhibited or copying of both digital data and analog signals is inhibited;

compressing said signal to generate a compressed signal;

ciphering said compressed signal according to key information to generate a ciphered signal, wherein said key information is used for deciphering said ciphered signal when said ciphered signal is reproduced;

arraying said recording control information at a pre-set position of said signal record medium, such that when a second record medium is generated by replicating said record medium, said recording control information indicates the playback mode of said second record medium during analog reproduction of said signal from said second record medium by a reproducing apparatus; and

recording on said signal record medium said ciphered signal at a program area of said record medium, and recording at said pre-set position of said record medium analog copy protection bits and said key information as said recording control information;

wherein said program area comprises a sync portion, a header portion, and a data area; said key information being stored in said header portion of said program area.

Claim 107. (original) The method according to claim 106, wherein said digital data is partitioned into units and said recording control information is included in at least one of said units.

Claim 108. (original) The method according to claim 107, wherein said at least one unit is placed in a lead-in area and/or said program area of said recording medium.

Claim 109. (original) The method according to claim 107, wherein said record medium is a disc-shaped record medium.

Claim 110. (original) The method according to claim 107, wherein said record medium is an Integrated Circuit (IC) record medium.

Claim 111. (currently amended) A signal recording apparatus comprising:
recording control information generating means for generating recording control information for supervising the recording of said signal on a signal record medium; said recording control information including copy management information indicating whether copying of only digital data is inhibited or copying of both digital data and analog signals is inhibited;
compressing means for compressing said signal to generate a compressed signal;
ciphering means for ciphering said compressed signal using key information, wherein said key information is used for deciphering said ciphered signal when said ciphered signal is reproduced;
annexing means for annexing said recording control information at a pre-set position of said signal record medium, such that when a second record medium is generated by replicating said record medium, said recording control information indicates the playback mode of said second record medium during analog reproduction of said signal from said second record medium by a reproducing apparatus; and

recording means for recording on said signal record medium said ciphered signal at a program area of said record medium, and for recording on said signal record medium analog copy protection bits and said key information as said recording control information such that said analog copy protection bits and said key information are arrayed at said pre-set position of said record medium;

wherein said program area comprises a sync portion, a header portion, and a data area; said key information being stored in said header portion of said program area.

Claim 112. (original) The apparatus according to claim 111, wherein said digital data is partitioned into units and said recording control information is included in at least one of said units.

Claim 113. (original) The apparatus as claimed in claim 112, wherein said at least one unit is located in a lead-in area and/or said program area of said record medium.

Claim 114. (original) The apparatus as claimed in claim 113, wherein said key information is placed in a header area of said program area.

Claim 115. (currently amended) The apparatus as claimed in claim 111, wherein an analog signal is an analog video signal having a combination signal of plural pseudo synchronization pulses and plural white peak signals included across plural horizontal periods in a vertical blanking period.

Claim 116. (original) The apparatus as claimed in claim 111, wherein said analog signal is an analog color video signal having an associated color burst signal and wherein the phase of at least a portion of said color burst signal is changed from an original state.

Claim 117. (original) The apparatus as claimed in claim 111, wherein said analog signal is an analog video signal including a signal coded with plural bits at a pre-set position and wherein said signal coded with plural bits includes a recording limitation indicating a limitation on recording.

Claim 118. (currently amended) A digital signal record medium, comprising:

- a program area for storing a ciphered signal generated by ciphering a signal with key information; wherein said program area comprises a sync portion, a header portion, and a data area;
- a pre-set portion of said header portion of the program area for storing playback mode control information, said playback mode control information being indicative of a pre-set conversion operation on an analog signal generated from said signal;
- said playback mode control information including copy management information indicating whether copying of only digital data is inhibited or copying of both digital data and analog signals is inhibited;
- a lead-in area for storing said playback mode control information, as an alternative to storing said playback mode control information in said pre-set portion of said header portion of the program area; and

a-said header area portion of said program area and/or said lead-in area for storing said key information for use in deciphering said ciphered signal.

Claim 119. (original) The record medium as claimed in claim 118, wherein said pre-set portion of said program area is partitioned into a plurality of recording units.

Claim 120. (original) The record medium as claimed in claim 118, wherein said analog signal is an analog video signal and wherein said playback mode control information indicates arraying a combination signal of plural pseudo synchronization pulses and plural white peak signals across plural horizontal periods in a vertical blanking period of said analog video signal.

Claim 121. (original) The record medium as claimed in claim 118, wherein said analog signal is an analog color video signal and wherein said playback mode control information indicates changing the phase of at least a portion of a color burst signal associated with said color video signal.

Claim 122. (original) The record medium as claimed in claim 118, wherein said analog signal is an analog video signal and wherein said playback mode control information indicates arraying a signal coded with plural bits at a pre-set position in said analog video signal.

Claim 123. (original) The record medium as claimed in claim 118, wherein said record medium is an optical disc medium and said pre-set portion of said program area is located at a beginning portion of at least one recording track on said medium.